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## **Edward (Ted) Kastenhuber, PhD**

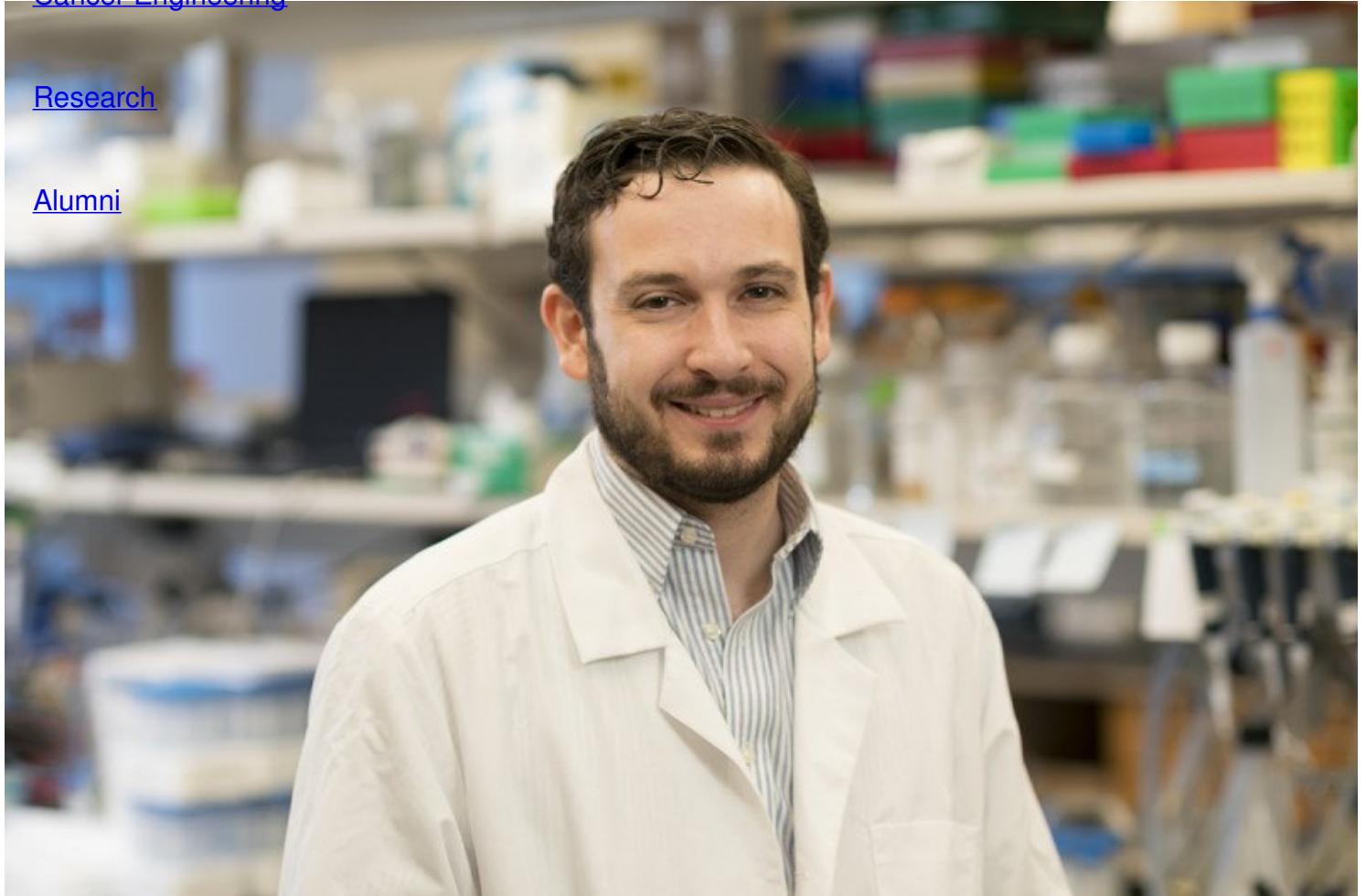
[Cancer Biology](#)

[Postdoctoral Associate, Weill Cornell Medicine, New York, NY](#)

[Cancer Engineering](#)

[Research](#)

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### **Dissertation**

[Functional interrogation of genetically simple and complex cancers \(2019\)](#)

### **Mentor**

[Scott W. Lowe, PhD](#)

## **Start Year**

2014

## **End Year**

2019

## **Education**

PhD, Gerstner Sloan Kettering Graduate School, New York, NY

Graduate Student in Lowe Lab from 2014-2019.

## **Publications**

[Loizou E, Banito A, Livshits G, Ho YJ, Koche RP, Sanchez-Rivera FJ, Mayle A, Chen CC, Kinalis S, Bagger FO, Kastenhuber ER, Durham BH, Lowe SW. \(2019\) A gain-of-function p53 mutant oncogene promotes cell fate plasticity and myeloid leukemia through the pluripotency factor Foxh1. Cancer Discov. pii: CD-18-1391.](#)

[Dinh TA, Jewell ML, Kanke M, Francisco A, Sritharan R, Turnham RE, Lee S, Kastenhuber ER, Wauthier E, Guy CD, Yeung RS, Lowe SW, Reid LM, Scott JD, Diehl AM, Sethupathy P. \(2019\) MicroRNA-375 Suppresses the Growth and Invasion of Fibrolamellar Carcinoma. Cell Mol Gastroenterol Hepatol. 7, 803-817. PMC6468197.](#)

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[Zafra MP, Schatoff EM, Katti A, Foronda M, Breinig M, Schweitzer AY, Simon A, Han T, Goswami S, Montgomery E, Thibado J, Kastenhuber ER, Sánchez-Rivera FJ, Shi J, Vakoc CR, Lowe SW, Tschaharganeh DF, Dow LE. \(2018\) Optimized base editors enable efficient editing in cells, organoids and mice. Nat Biotechnol. doi: 10.1038/nbt.4194. \[Epub ahead of print\].](#)

[Kastenhuber ER, Lazar G, Houlihan SL, Tschaharganeh DF, Baslan T, Chen CC, Requena D, Tian S, Bosbach B, Wilkinson JE, Simon SM, Lowe SW. \(2017\) DNAJB1-PRKACA fusion kinase interacts with β-catenin and the liver regenerative response to drive fibrolamellar hepatocellular carcinoma. Proc Natl Acad Sci U S A 114, 13076-13084. PMCID: PMC5740683.](#)

[Kastenhuber ER, Lowe SW. \(2017\) Putting p53 in Context. Cell 170, 1062-1078.](#)

[Shirole NH, Pal D, Kastenhuber ER, Senturk S, Boroda J, Pisterzi P, Miller M, Munoz G, Anderluh M, Ladanyi M, Lowe SW, Sordella R. \(2017\) TP53 exon-6 truncating mutations produce separation of function](#)  
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[Ladanyi M, Lowe SW, Gorodna I. \(2017\) 1100 cancer truncating mutations produce separation of function isoforms with pro-tumorigenic functions. \*Elife\* 6. PMCID: PMC5287711](#)

[Liu Y, Chen C, Xu Z, Scuoppo C, Rillahan CD, Gao J, Spitzer B, Bosbach B, Kastenhuber ER, Baslan T, Ackermann S, Cheng L, Wang Q, Niu T, Schultz N, Levine RL, Mills AA, Lowe SW. \(2016\) Deletions linked to TP53 loss drive cancer through p53-independent mechanisms. \*Nature\*, 531, 471-5.](#)

[Ebbesen SH, Scaltriti M, Bialucha CU, Morse N, Kastenhuber ER, Wen HY, Dow LE, Baselga J, Lowe SW. \(2016\) Pten loss promotes MAPK pathway dependency in HER2/neu breast carcinomas. \*Proc Natl Acad Sci U S A\*, pii: 201523693. PMCID: PMC4801318.](#)

[Dow LE, Fisher J, O'Rourke KP, Muley A, Kastenhuber ER, Livshits G, Tschaharganeh DF, Socci ND, Lowe SW. \(2015\) Inducible in vivo genome editing with CRISPR-Cas9. \*Nat Biotechnol.\*, 33, 390-4. PMCID: PMC4390466.](#)

[Lito, P., Saborowski, A., Yue, J., Solomon, M., Josephm E., Gadal, S., Saborowski, M., Kastenhuber, E., Fellmann, C., Ohara, K., Morikami, K., Miura, T., Lukacs, C., Ishii, N., Lowe, S., and Rosen, N. \(2014\) Disruption of CRAF-Mediated MEK Activation Is Required for Effective MEK Inhibition in KRAS Mutant Tumors, \*Cancer Cell\*, 25, 697-710. PMID: 24746704; PMCID: PMC4049532.](#)

[Tschaharganeh DF, Xue W, Calvisi DF, Evert M, Michurina TV, Dow LE, Banito A, Katz SF, Kastenhuber ER, Weissmueller S, Huang CH, Lechel A, Andersen JB, Capper D, Zender L, Longerich T, Enikolopov G, Lowe SW. \(2014\) p53-dependent Nestin regulation links tumor suppression to cellular plasticity in liver cancer. \*Cell\*, 158, 579-92. PMCID: PMC4221237.](#)

[Kastenhuber ER, Huse JT, Berman SH, Pedraza A, Zhang J, Suehara Y, Viale A, Cavatore M, Heguy A, Szerlip N, Ladanyi M, Brennan CW. \(2014\) Quantitative assessment of intragenic receptor tyrosine kinase deletions in primary glioblastomas: their prevalence and molecular correlates. \*Acta Neuropathol.\*, 127, 747-59. PMCID: PMC3984672.](#)

[Kannan K, Inagaki A, Silber J, Gorovets D, Zhang J, Kastenhuber ER, Heguy A, Petrini JH, Chan TA, Huse JT. \(2012\) Whole-exome sequencing identifies ATRX mutation as a key molecular determinant in lower-grade glioma. \*Oncotarget\*, 3, 1194-203. PMCID: PMC3717947.](#)

[Gorovets D, Kannan K, Shen R, Kastenhuber ER, Islamdoust N, Campos C, Pentsova E, Heguy A, Jhanwar SC, Mellinghoff IK, Chan TA, Huse JT. \(2012\) IDH mutation and neuroglial developmental features define clinically distinct subclasses of lower grade diffuse astrocytic glioma. \*Clin Cancer Res.\*, 18, 2490-501.](#)

[Morris LG, Taylor BS, Bivona TG, Gong Y, Eng S, Brennan CW, Kaufman A, Kastenhuber ER, Banuchi VE, Singh B, Heguy A, Viale A, Mellinghoff IK, Huse J, Ganly I, Chan TA. \(2011\) Genomic dissection of](#)

[the epidermal growth factor receptor \(EGFR\)/PI3K pathway reveals frequent deletion of the EGFR phosphatase PTPRS in head and neck cancers. Proc Natl Acad Sci U S A, 108, 19024-9. PMCID: PMC3223475.](#)

[Huse JT, Nafa K, Shukla N, Kastenhuber ER, Lavi E, Hedvat CV, Ladanyi M, Rosenblum MK. \(2011\) High frequency of IDH-1 mutation links glioneuronal tumors with neuropil-like islands to diffuse astrocytomas. Acta Neuropathol., 122, 367-9. PMCID: PMC3170121.](#)

[Palaskas N, Larson SM, Schultz N, Komisopoulou E, Wong J, Rohle D, Campos C, Yannuzzi N, Osborne JR, Linkov I, Kastenhuber ER, Taschereau R, Plaisier SB, Tran C, Heguy A, Wu H, Sander C, Phelps ME, Brennan C, Port E, Huse JT, Graeber TG, Mellinghoff IK. \(2011\) 18F-fluorodeoxy-glucose positron emission tomography marks MYC-overexpressing human basal-like breast cancers. Cancer Res., 71, 5164-74. PMCID: PMC3148325.](#)

[Zhu X, Fallert-Junecko BA, Fujita M, Ueda R, Kohanbash G, Kastenhuber ER, McDonald HA, Liu Y, Kalinski P, Reinhart TA, Salazar AM, Okada H. \(2010\) Poly-ICLC promotes the infiltration of effector T cells into intracranial gliomas via induction of CXCL10 in IFN-alpha and IFN-gamma dependent manners. Cancer Immunol Immunother, 59, 1401-9. PMCID: PMC2893267.](#)

[Fujita M, Scheurer ME, Decker SA, McDonald HA, Kohanbash G, Kastenhuber ER, Kato H, Bondy ML, Ohlfest JR, Okada H. \(2010\) Role of type 1 IFNs in antglioma immunosurveillance—using mouse studies to guide examination of novel prognostic markers in humans. Clin Cancer Res., 16, 3409-19. PMCID: PMC2896455.](#)

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[Okada H, Kohanbash G, Zhu X, Kastenhuber ER, Hoji A, Ueda R, Fujita M. \(2009\) Immunotherapeutic approaches for glioma. Crit Rev Immunol., 29, 1-42. PMCID: PMC2713019.](#)

[Fujita M, Zhu X, Ueda R, Sasaki K, Kohanbash G, Kastenhuber ER, McDonald HA, Gibson GA, Watkins SC, Muthuswamy R, Kalinski P, Okada H. \(2009\) Effective immunotherapy against murine gliomas using type 1 polarizing dendritic cells—significant roles of CXCL10. Cancer Res., 69, 1587-95.](#)

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